



Learning Technologies Project Bulletin

Brought to you by NASA, BDM International, & West Virginia University

News from NASA

"Up, Up and Away" 1998 LTP Conference

The 1998 LTP Conference will be hosted by the Gulf of Maine Aquarium in Portland, Maine. Mark your calendars for Monday, June 1, to Wednesday, June 3. The conference hotel is the Holiday Inn By the Bay (<http://www.innbythebay.com/>). Please visit the 1998 LTP Conference announcement page on the Developers' Workshop at <http://developers.ivv.nasa.gov/>

ltpconf/9806/ for additional hotel information and continuous postings of the agenda, program, registration information, and project requirements for this conference. General questions may be sent to workshop@rspac.ivv.nasa.gov.

Hotel Information

The deadline for hotel reservations is Friday, May 8. A block of rooms has been reserved at the Holiday Inn By the Bay under the name NASA LTP Conference. The room rate will be \$65 per night. This is the allowable rate for government lodging on these dates in Portland, Maine.

Reservations may be made by calling (800)345-5050. The address of the hotel is 88 Spring Street, Portland, Maine.

It is the responsibility of conference attendees to make hotel and travel arrangements. Hotel reservations made after Friday, May 8, will be provided on a space-available basis. The government rate may not be available at that time.



News Bytes

Let's Chat It up During National Engineers' Week!

John Evans and Shelley Canright

Let's chat! That's the goal of this National Engineers' Week Internet event being tested through a cooperative effort between NASA Langley's LTP and Office of Education and the Virginia Space Grant Consortium. The Internet event supports the video project Journey Into Cyberspace (JIC). A modified chat session will bring selected participants from the video series together with educators and students who will be able to ask questions online.

JIC is a six-part video series designed for use in the middle school classroom with curriculum materials and a Web site containing resource materials and links for further career exploration. The series tells the story of two students who are accidentally transported through their computer to university campuses where Virginia Space Grant-sponsored students explain their research and show real-world applications of high-tech research.

The series debuted in October 1997, and has since been offered locally through public television in the Tidewater, VA, area. In an arrangement with NASA TV, the series will be broadcast during the last week of February in recognition of National Engineers' Week. It will be shown concurrently through the Learning Technologies Channel. In a special extension to the broadcast, a Web chat will be held each weekday beginning at 2:30 p.m. EST.

Participants will be able to gather to watch and hear a speaker give a presentation, then ask questions. There will be a "lobby" where participants will be able to chat among themselves before entering the "auditorium."

When the presentation is over the audience will be able to ask questions. The speaker will be able to direct answers to individuals or to the whole group.

JIC encourages middle school students to consider science, math, engineering, and high-tech careers. The chat sessions allow the students to have personal contact with people they have seen in videos, as well as with other NASA, industry, and educational specialists. Further details on the series and the chat sessions can be found at <http://careerjourney.vsgc.odu.edu>, or by contacting the authors at jevans@k12unix.larc.nasa.gov.

In the Spotlight

Live @ the Exploratorium: Solar Eclipse

Karen Alcorn
karena@cea.berkeley.edu

On February 26, a total solar eclipse will occur across the southern Caribbean. On February 25 and 26, an expedition of NASA's Sun-Earth Connection Education Forum (SECEF), the Exploratorium, and Discovery Online will be stationed along the path of totality, sharing live images of the eclipse with museum visitors and an Internet audience through Live @ the Exploratorium. Scientists from Stanford University and UC Berkeley will highlight NASA's cutting-edge solar research and images. SECEF, a joint partnership of UC Berkeley's Space Sciences Laboratory (SSL) and the Goddard Space Flight Center, is hosting the event.

There will be a live Webcast on February 25 (7:00 p.m. - 9:00 p.m. PST) and one on February 26 (9:00 a.m. - 11:00 a.m. PST). Both will switch between the Exploratorium and the expedition team in Aruba. For more information on the Webcast schedule, participants, or partnerships, go to NASA's SECEF Web site at sunearth.gsfc.nasa.gov.

Each Webcast will feature interviews with SECEF scientists, discussions of the science that happens during an eclipse, and interaction with the audience in the Exploratorium and over the Internet.

Wednesday's Webcast will be presented in conjunction with Discovery Online's Discovery Live!, hosted by Neal Conan. Exploratorium scientists will give a brief explanation of the eclipse. Todd Hoeksema from Stanford University's Solar Oscillation Investigation (SOI) group and Bob Lin from UC Berkeley's Space Sciences Laboratory will then discuss current and future research of the Sun. In addition, interviews will be conducted with David Dearborn, a stellar physicist and archaeoastronomer in Aruba,

children who have witnessed a solar eclipse, and the technology specialists in Aruba (who will explain the technology behind the live Webcasts).

The Exploratorium's Zane Vella, who is a teacher and the Live@ producer, will moderate Thursday's Webcast of the eclipse. Phil Scherrer, a solar physicist who directs the research of the SOI group, will share information about current research of the Sun. Janet Luhmann, a space scientist at UC Berkeley's Space Sciences Laboratory, will discuss how the active Sun affects the Earth's environment. Exploratorium scientists and the crew in Aruba will explore the science, research, and history of eclipses and the Sun's corona. (The corona becomes visible during an eclipse and is the subject of much of the current research.)

To Attend the Webcast at the Exploratorium

To be a member of the studio audience, simply go to the Exploratorium. There is no special admission to join the Webcast — only the normal Exploratorium admission prices apply. Doors will open at 9:00 a.m. on February 26 for the eclipse Webcast.

To Attend the Webcast over the Internet

To view the live video and audio and to interact with others in the chat rooms, an Internet connection of 28.8 Kbps or better is required, and your machine must be running either Microsoft Explorer 3.0 or better or Netscape 2.0 or better. PCs should be ready to participate, but Macintosh users may need to download RealAudio in order to hear the action as well as see it. To download any of this software, follow the appropriate links from www.exploratorium.edu. In addition to providing live action, the eclipse Web site will be a resource for information on eclipses, including activities, science, and articles on the historic significance of eclipses.

The NASA Goddard Space Flight Center team has provided and supported the unique satellite link between Aruba and the

San Francisco Exploratorium, and NASA's Solar and Heliospheric Observatory (SOHO) will provide live solar data. The NASA Sun-Earth Connection scientists will provide scientific expertise for the event.



New RSPAC Program Manager

Stratis Kakadelis, RSPAC's program manager, will be leaving his position on February 20. Stratis will be succeeded by Joseph V. Gardner, Ph.D.

Stratis and his family are moving to the Baltimore area, where he will work with the Hubble Space Telescope Science Institute (also affiliated with NASA's Learning Technologies Project). He has been with RSPAC since its inception.

"I've really enjoyed working with the RSPAC staff and the entire LTP community over the last three years," Stratis said. "Even though I'm leaving RSPAC, I'm not leaving the NASA community. I'm sure I will see many of you at conferences and other science events. Keep the excitement of NASA flowing into the classroom!"

Dr. Gardner is currently the curator for NASA's Observatorium Web site, and employed by RSPAC as a senior scientist. As program manager, he will oversee the daily operations of RSPAC, which include wide-ranging technical support and other services to LTP and its individual groups.

Nothin' — but Net

A New Look at the Logo

Melissa Waybright

mpatters@rspac.ivv.nasa.gov

As time passes, changing our views and opinions of the world, we begin to take notice of things that appear outdated. The old brown-and-orange plaid couch just isn't in style anymore. Those sweaters that have been around since college need to go. And no one listens to families who sing on multicolored buses. Although no one person can dictate what's in and what's out, it's generally agreed that there is a need for a good makeover every once in awhile. And while a makeover is good on a personal level, it's often good for business too.

For example, an outdated business approach is not going to take a company to

the top, and neither is an outdated logo. A fresh appearance for a business includes a strong logo that will attract attention by effectively communicating a visual identity.



This is something that text cannot accomplish alone. It is especially true if the business or organization is expanding and there is a need to express a particular identity. A

new look will help reflect the group's new ideas. Here are some ways to determine whether a logo is doing its job:

- Is the meaning of the logo immediately apparent to most viewers?
- Does it convey a message?
- Is the logo scaleable enough to be legible and printable in a variety of sizes?
- Can the logo be used in black and white as well as in color?

Have some brainstorming sessions before selecting a logo. It takes time, and possibly a number of versions, to develop one that is appropriate. Keep it simple (always a good design tip)! Finally, make sure the newly developed logo is not being used anywhere else by contacting the Trademark Assistance Center at (703)308-9000.

Remember, an outdated logo can make a business or organization look outdated. A good logo will speak for itself and be fresh enough to grab the attention of the viewer.

News — Bytes (cont.)

PTK's "Live From the Rainforest" Makes Its Debut

Eileen Bendixsen

ebend@netlabs.net

The preview version of the "Live From the Rainforest" Web site (<http://passport.ivv.nasa.gov/rainforest>) debuted on February 9. Here you'll find the dates and times of the videos, extensive information about the contents of the Teacher's Guide and the Multimedia Kit and how to order them, sample lessons, journals of the Smithsonian/INPA team, and a preview of the site itself. More content and images will be added to the main sections of the site in

the coming weeks. GEOsystem, ECOSystem, TEAMS, and INTERACT will soon be populated by the plants, animals, and people of the rainforest.

LDAPS Puts Preliminary Web Site Online

Benjamin Erwin

berwin@emerald.tufts.edu

The LEGO Data Acquisition and Prototyping System (LDAPS) project at Tufts University now has a preliminary Web site of outreach activities online at the after-school center in South Boston. The site is located at <http://www.paraclete.org/Engineering/>.

E-mails have been received from parents and teachers interested in starting LDAPS-related curricula in their classrooms, and several people are downloading the software from the Web every day. A new and improved version of the software seems to be going up on the site every week!

LDAPS is also featured on the cybertoy's homepage at <http://www.workshop3d.com/cybertoy's/legalex.htm>. The LEGO airplane stand and LEGO foam-wing cutter are featured!

If you would like to be on the LTP Bulletin mailing list, please send e-mail to Scott Gillespie at: sgillespie@rspac.ivv.nasa.gov, or write to: BDM/RSPAC, 100 University Drive, Fairmont, WV 26554. Phone: (304) 367-8324, fax: (304) 367-8211.

Highlights & Happenings

MCET Update

Francesca Casella
franc@mcet.edu

Six teachers at Danvers High School have completed the Internet training. The two physics teachers in the group will use the complete Take Off! series with their students, and another teacher will select some units to use in the classroom.

The new @meol at the schools is operational. Students in Randolph installed the memory chip and configured the flight yoke for the flight simulator, and the Eagle Club will build the wind tunnel. FOILSIM software, the virtual wind tunnel visualization developed by NASA Lewis Research Center, was sent to Randolph and East Boston.

Construction at Dorchester is still under way. As a result, teachers at this site cannot use the media and computer labs and have no access to the school's network or

satellite feed. If the school is unable to meet minimum requirements, no additional support will be provided.

Shelia Bauer met with teachers at the Travel and Tourism Academy at East Boston High School in an effort to involve more teachers in the aviation program and convince the administration to support future aviation education or school-to-work/school-to-career programs. The school administration is currently involved in a restructuring plan (expected to be effective at the beginning of next academic year), so no additional initiatives will be started until a final plan is in place. A proposal to include East Boston High School in the Adopt-A-School program will be presented for approval. The teachers have expressed concern about a lack of funding sources to support the program, and several possibilities have been discussed (including encouraging the school to develop grant funds; this met with some resistance).

Development of the final Take Off! kit prototype began in January. The kit will include a video series, a teacher's guide, Web-based software, and promotional materials.

The video series will target middle to junior high school students and feature six or seven 20-minute units addressing the physics of flight, how an airplane flies, aircraft

instruments and airport systems, navigation, weather and aviation, and human factors.

The units will build upon materials developed for the live shows and will be modified to fit a different media. Selections will take into account feedback from teachers and students who participated in the live broadcasts. Also used will be a set of guidelines developed by the evaluation team ([EdAlliance@Brown University](mailto:EdAlliance@BrownUniversity)).

The teacher's guide (print) for the final series will include an introduction to the contents of the kit and the many ways it can be used in the classroom. The new guide will build upon the content developed for the second Take Off! series, but all chapters will be updated to align with the outline of the modified video series and will include additional curricula covering GPS satellite navigation, human factors (biology), and weather. Additional activities (some updated from existing materials, some developed ad hoc) will also be a part of the guide.

The software, developed in HTML, will provide additional information about the kit and its uses, and will include a list of online and other resources. The lists will help the teachers find local sources of some of the resources included in the curriculum kits that have been mailed to registrants in past years.

News —Bytes (cont.)

NASA's Observatory Supporting LTP

For the past three years, NASA's Observatory has provided support to NASA CATs. The Observatory offers a wide range of articles and activities online. We have begun to highlight the LTP Web sites referred to in these articles and activities by using the LTP logo to make the links to these sites stand out. For example, in a recent article on the Earth's seasons, we promoted the entire LTP, as well as Science Education Gateway (<http://www.ucls.uchicago.edu/MartianSunTimes/docs/>

[inv1.html](http://www.circles.org/Round3/Curric/EarthSys/earthsys1.html)), The Earth System Science Community (ESSC) (<http://www.circles.org/Round3/Curric/EarthSys/earthsys1.html>), and Using Science and the Internet as Everyday Classroom Tools from the Smithsonian Astrophysical Observatory (http://hea-www.harvard.edu/ECT/the_book/toc.html).

Over the last few months the Observatory has seen a dramatic increase in traffic, with 4 million hits in January. We plan to continue to feature LTP sites and funnel more hits to them.

This bulletin will also be available in Adobe Acrobat format on the Developers' Workshop Web site at: <http://developers.ivv.nasa.gov/collab/pubs/bulletin/>

Removal of RSPAC's Dormant Mailing Lists

Several mailing lists that were created for CATs have been dormant for over a year. If there are no objections, RSPAC plans to remove them. We will continue to maintain the announce mailing list, as it is used to post project monthlies, announcements, etc. The lists that would be removed are aero (K-14 aeronautics CAT forum), ant (Affordable Networking Technology forum), education (curricula, standards, assessments, etc.), and technology (technologies relevant to CATs). If you would like to keep any of these lists alive, please inform Winsome Mundy at wmundy@rspac.ivv.nasa.gov. If we can't come up with a good reason to keep them active, they will be removed by the end of March.

News

—Bytes (Cont.)

Web Statistics Reporting and Mirrors at RSPAC

Rich Kurnik
rkurnik@rspac.ivv.nasa.gov

With the move to a Web-based method of reporting LTP activities, several metrics, including Web statistics, are required on a monthly basis from the projects.

RSPAC currently mirrors several sites and uses their associated server logs to generate monthly statistics. Mirror statistics are

not reported as a part of the RSPAC monthly Web statistics metrics, so if they are not reported by the individual projects, then they are not reported to LTP management. This reduces the overall Web statistics totals for LTP.

If you have a mirror site at RSPAC, Web statistics can be found at **<http://mirrors.ivv.nasa.gov>** under Mirror Support Statistics. Monthly statistics are generated by the fifth of the following month.

The total hits and bytes transferred options remove requests made from RSPAC machines. Please note that bytes (not kilobytes) transferred are provided by RSPAC. To convert bytes transferred to kilobytes transferred (required for the LTP monthly report), divide by 1024 (not 1000) so that we are all reporting using the same level of accuracy. In the future, RSPAC will pro-

vide kilobytes transferred for easier reporting.

If you are interested in having RSPAC mirror your site or installing The Inquisitor on your server, please contact Winsome Mundy at wmundy@rspac.ivv.nasa.gov.

Remember: 1 KILOBYTE=1024 BYTES



NASA's Learning Technologies Project (LTP) Bulletin is a monthly publication produced by the Remote Sensing Public Access Center (RSPAC). RSPAC is a cooperative project of NASA's Office of Aeronautics' High Performance Computing and Communications (HPCC) program, BDM International, and West Virginia University. RSPAC is located at the NASA Software Independent Verification and Validation (IV&V) facility in Fairmont, West Virginia.

RSPAC/BDM
WVU/NASA IV&V Facility
100 University Drive
Fairmont, WV 26554

February 1998



ADDRESS CORRECTION REQUESTED